

What is claimed is:

1. A keyboard comprising:
a surface layer having a top side, a plurality of keys, and a mode switch,
wherein each key includes a key area on the top side of the surface layer and a
5 key sensor,
wherein the mode switch switches the keyboard from a typing mode of
operation, in which the key sensors generate normal keyboard signals including
alphanumeric signals, when the key areas are contacted, to a pointing mode of
operation, in which the key sensors generate pointer movement signals when the key
10 areas are contacted.
2. The keyboard of claim 1, wherein each key sensor comprises a key switch and a
keychip.
- 15 3. The keyboard of claim 2, wherein the keychip comprises a debouncer circuit.
4. The keyboard of claim 1, further comprising a marked reference point on the
top side of the surface layer for a pointer movement.
- 20 5. The keyboard of claim 1, wherein the pointer movement signal contains
information concerning the direction and speed of the pointer movement.
6. The keyboard of claim 1, wherein the key areas on the surface layer are
dimpled.
- 25 7. The keyboard of claim 1, further comprising a left mouse button and a right
mouse button.
8. The keyboard of claim 7, wherein the mode switch, the left mouse button, and
30 the right mouse button are located at a lower left corner of the keyboard.
9. The keyboard of claim 1 wherein the keyboard is foldable or rollable.

10. A keyboard comprising:
a surface layer having a top side, a mode switch, a plurality of visible keys, and a plurality of hidden keys, wherein the visible key includes a marked key area on the top side of the surface layer and the hidden key includes a unmarked key area on the top side of the surface layer.
a first set of key sensors, proximally located under the marked key areas on the surface layer, that generate signals when the marked key areas are contacted; and
a second set of key sensors, proximally located under the unmarked key areas, that generate signals when the unmarked key areas are contacted and the second set of key sensors are active,
wherein the mode switch switches the keyboard from a typing mode of operation, in which the second set of key sensors are inactive and the first set of key sensors generate normal keyboard signals including alphanumeric signals, when the marked key areas are contacted, to a pointing mode of operation, in which both the first set and the second set of key sensors are active, and the key sensors generate pointer movement signals when the marked and/or unmarked key areas are contacted.
11. The keyboard of claim 10, wherein each key sensor comprises a key switch and a keychip.
12. The keyboard of claim 11, wherein the keychip comprises a debouncer circuit.
13. The keyboard of claim 10, further comprising a marked reference point on the top side of the surface layer for a pointer movement.
14. The keyboard of claim 10, wherein the pointer movement signal contains information concerning the direction and speed of the pointer movement.
15. The keyboard of claim 10, wherein the key areas on the surface layer are dimpled.
16. The keyboard of claim 10, further comprising a left mouse button and a right mouse button.

17. The keyboard of claim 10 wherein the keyboard is foldable or rollable.
18. A keyboard comprising a plurality of keys and a circuit that includes:
a keyboard controller;
5 a plurality of serially connected key sensors each comprising a keychip and a key switch,
wherein each key sensor generates a sensor signal when the key switch is actuated, and wherein the keyboard controller scans the key sensors in a serial fashion and generates scan code data responsive to the sensor signals.
- 10 19. The keyboard circuit of claim 18, wherein the keychip contains a debouncer circuit.
20. The keyboard circuit of claim 18, wherein the keyboard controller and the key
15 sensors are connected in series through five wires: a voltage wire, a ground wire, a keyboard clock wire, a controller wire, and a key scan wire.